

AMENDMENTS TO THE CLAIMS

1. (Previously Presented) An optical module containing a support (T) in which a groove (VG) is introduced and an optical fibre (F) mounted in the groove (VG) characterized by a contact layer (CL) that is applied to the support (T) and comprises a plurality of strips extending essentially perpendicularly to the groove (VG) and that forms a mechanical joint with the fibre (F) when the fibre (F) is pressed into the groove (VG) in the form of a cold weld.
2. (Previously Presented) The optical module according to claim 1, in which the strip-shaped contact layer (CL) is composed of aluminum (Al).
3. (Previously Presented) The optical module according to claim 1, in which the fibre (F) is composed of SiO₂ or is coated with SiO₂.
4. (Previously Presented) The optical module according to claim 1, in which between two and four strips having a width of about 200 µm each are provided.
5. (Previously Presented) The optical module according to claim 1, in which a multiplicity of strips are provided that have a width of up to a few tens of micrometers.
6. (Previously Presented) The optical module according to claim 1, in which the strips are each structured in turn to form a plurality of narrow ribs.
7. (Previously Presented) The optical module according to claim 1, in which the groove (VG) is a V-groove.
8. (Previously Presented) The optical module according to claim 1, in which the last subsection of the groove (VG) in the direction of the support edge is free of the contact layer

(CL).

9. (Previously Presented) A support (T) for an optical module, containing a groove (VG) for fixing an optical fibre (F), characterized by a contact layer (CL) applied to the support (T) and composed of a plurality of strips extending essentially perpendicularly to the groove (VG) and that forms a mechanical joint with the fibre (F) when the fibre (F) is pressed into the groove (VG).

10. (Previously Presented) A method of producing an optical module containing a support (T) into which a groove (VG) has been introduced and an optical fibre (F) mounted in the groove (VG), comprising the following steps:

introduction of the groove (VG) into the support (T);

application of a contact layer (CL) that is composed of a plurality of strips extending essentially perpendicularly to the groove (VG) and that forms a mechanical joint with the fibre (F) when the fibre (F) is pressed into the groove (VG); and

pressing of the optical fibre (F) into the groove (VG) in the form of cold welding.

11. (Previously Presented) A method according to claim 10, in which the fibre (F) is stripped before being pressed in.

12. (Cancelled)

13. (Previously Presented) The method according to claim 10, in which the contact layer (CL) is applied by sputtering and, in which process, a mask having slots is used for the contact-layer strips.

14. (Previously Presented) The method according to claim 10, in which the contact layer

(CL) is applied as a blanket and then structured by applying an etching procedure to form strips extending essentially perpendicularly to the groove (VG).